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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/175,522	10/20/1998	PAUL STEPHAN BEDROSIAN	L0012/7001	7010

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EXAMINER

PHAN, HANH

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 04/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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7590 12/12/2001

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EXAMINER

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Office Action Summary

Application No.
09/175,522

Applicant(s)
BEDROSIAN

Examiner
Hanh Phan

Art Unit
2633



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 20, 1998
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14, and 16-20 is/are rejected.
- 7) ☒ Claim(s) 11-13, 15, and 21 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 16 are rejected under 35U.S.C.102(b) as being anticipated by Bunse (U.S. Patent number 5,654,815).

Regarding claims 1 and 16, Bunse teaches apparatus for providing synchronization signals to a telecommunications network comprising:

a central synchronization management unit (switching network SN)((Fig. 1) for distributing synchronization signals, and a synchronization distribution unit (synchronizing subunits SUB1 to SUB3)(Fig. 1, col. 7, lines 55-62) connected to receive synchronization signals from the central synchronization management unit (switching network SN) and to distribute the signals to at least one network element (terminals E1, E2, E3)(Fig. 1).

Regarding claim 2, Bunse teaches apparatus for providing synchronization signals to a telecommunications network wherein the synchronization signals are optical signals (col. 7, lines 8-62).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunse (U.S. Patent number 5,654,815) in view of Sotom et al (U.S. Patent number 5,796,501).

Regarding claim 3, Bunse differs from claim 3 of the present invention in that he does not disclose an optical processor for producing optical clock signals. However, as evidenced by Sotom, providing an optical processor (23)(Fig. 4) for producing optical clock signals (col. 3, lines 24-67, col. 4, lines 1-67, col. 5, lines 6-67, col. 6, lines 1-40) is well known in the art. It would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the optical processor as taught by Sotom in the apparatus described in Bunse in order to allow easier upgrade and eliminate complicate circuitries.

Regarding claim 4, the combination of Bunse and Sotom teaches an apparatus wherein central synchronization management unit further comprises a processor for retiming clock signals received at said input port (Fig. 4 of Sotom, col. 5, lines 6-65).

5. Claims 5-7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunse (U.S. Patent number 5,654,815) in view of Sotom et al (U.S. Patent number 5,796,501) and further in view of Tanaka et al (U.S. Patent number 6,160,816).

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Regarding claims 5 and 17, the combination of Bunse and Sotom differs from claims 5 and 17 of the present invention in that it does not specifically teach wherein the input port is equipped to receive clock signals from a plurality of clock sources. However, as evidenced by Tanaka, providing the input port is equipped to receive clock signals from a plurality of clock sources (Figs. 2-4, col. 1, lines 14-67, col. 2, lines 1-64) is well known in the art. Therefore, it would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the input port is equipped to receive clock signals from a plurality of clock sources as taught by Tanaka to combination of Bunse and Sotom in order to reduce the jitter and phase error.

Regarding claim 6, the combination of Bunse, Sotom, and tanaka teaches apparatus for providing synchronization signals to a telecommunications network wherein the central synchronization management unit selects one of a plurality of input clock signals as a primary clock output signal (Fig. 4 of Sotom and Figs. 2-4 of Tanaka).

Regarding claim 7, the combination of Bunse, Sotom, and Tanaka teaches apparatus for providing synchronization signals to a telecommunications network wherein the central synchronization management unit produces a plurality of optical clock output signals (Fig. 1 of Bunse).

6. Claims 8-10 and 14 are rejected under 35U.S.C.103(a) as being unpatentable over Bunse (U.S. Patent number 5,654,815) in view of Abe (U.S. Patent number 5,687,015).

Regarding claim 8, Bunse differs from claim 8 of the present invention in that he does not disclose wherein the synchronization distribution unit comprises a passive optical input port

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configured to receive an optical clock signal and to split the optical clock signal into two signals, routing one of the split signals to an optical output. However, as evidenced by Abe, providing wherein the synchronization distribution unit comprises a passive optical input port configured to receive an optical clock signal and to split the optical clock signal into two signals, routing one of the split signals to an optical output (Figs. 36 and 37, col. 7, lines 47-67, col. 8, lines 1-67, col. 9, lines 1-56) is well known in the art. Therefore, it would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the synchronization distribution unit comprises a passive optical input port configured to receive an optical clock signal and to split the optical clock signal into two signals, routing one of the split signals to an optical output as taught by Abe in the synchronization distribution unit described by Bunse in order to maintain the communication network when a fault has developed (col. 7, line 50).

Regarding claim 9, the combination of Bunse and Abe teaches apparatus for providing synchronization signals to a telecommunications network wherein the synchronization distribution unit comprises a active optical input port configured to receive an optical clock signal; and a clock recovery system configured to perform clock recovery on an optical clock signal received at either the active or passive optical input port (Figs. 36 and 37, col. 7, lines 46-67, col. 8, lines 1-67, col. 9, lines 1-56).

Regarding claims 10 and 14, the combination of Bunse and Abe teaches apparatus for providing synchronization signals to a telecommunications network wherein the clock recovery system is configured to receive optical clock signals from said active optical input port and from

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said passive optical input port and to perform clock recovery on an optical clock input from a selected one of the active and passive optical input ports.

7. Claims 18-20 are rejected under 35U.S.C.103(a) as being unpatentable over Bunse (U.S. Patent number 5,654,815) and Sotom et al (U.S. Patent number 5,796,501) in view of Tanaka et al (U.S. Patent number 6,160,816) and further in view of Abe (U.S. Patent number 5,687,015).

Regarding claim 18, the combination of Bunse, Sotom, and Tanaka differs from claim 18 in that it does not disclose wherein the central synchronization management unit produces two clock output signals from the selected one of the plurality of clock signals received by the central synchronization management unit and transmits one of the clock output signals over an optical link to an active input port of the synchronization distribution unit and transmits the other of the clock output signals over an optical link to a passive input port of the synchronization distribution unit. However, as evidenced by Abe, providing wherein the central synchronization management unit produces two clock output signals from the selected one of the plurality of clock signals received by the central synchronization management unit and transmits one of the clock output signals over an optical link to an active input port of the synchronization distribution unit and transmits the other of the clock output signals over an optical link to a passive input port of the synchronization distribution unit (Figs. 36 and 37, col. 7, lines 46-67, col. 8, lines 1-67, col. 9, lines 1-56) is well known in the art. Therefore, it would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the the central synchronization management unit as taught by Abe in the central synchronization management unit described by

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Bunse in order to provide a protection line for the communication network when a fault has developed.

Regarding claim 19, the combination of Bunse, Sotom, Tanaka, and Abe teaches apparatus for providing synchronization signals to a telecommunications network wherein further comprising the step of selecting by an synchronization distribution unit of one of the passive and active optical input clock signals to transmit to a network element (Figs. 36 and 37 of Abe).

Regarding claim 20, the combination of Bunse, Sotom, Tanaka, and Abe teaches apparatus for providing synchronization signals to a telecommunications network wherein the selected clock signal is converted from an optical to an electrical signal before transmission to the network element (Figs. 36 and 37 of Abe).

8. Claims 11-13, 15, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sotom et al (U.S. Patent number 5,896,212) teaches wavelength division multiplexing optical communication network.

Klopper et al (U.S. Patent number 5,790,171) teaches video dial tone network synchronization.

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Sakai et al (U.S. Patent number 5,557,437) teaches optical terminal system having self-monitoring function.

Kinstler (U.S. Patent number 6,057,949) teaches bidirectional infrared communications system.


Aunon et al (U.S. Patent number 5,537,093) teaches electrooptical line module for transmitting in synchronous digital hierarchy with synchronizing unit.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600